

Weekly Report

本周：

1. 看了一些文章的 Introduction, 写了部分 Introduction. 预计周二前完成 Introduction.

Cities have always been the research focus because of inherently containing abundant values both in humanistic and in business for various stakeholders. Park and Burgess in their seminal work *The city* [1] deem that city is involved in the vital process of citizens and a product of nature and human nature. Propagated by their idea, Fabio Miranda et al [2] propose urban pulse for understand the city in the context of multiple urban data sets.....

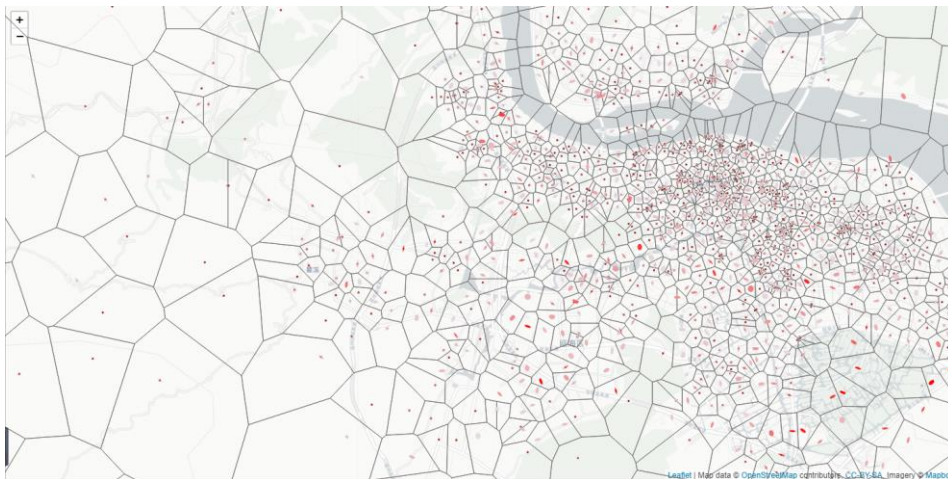
The availability of location-aware data sets enables unprecedented opportunities for understanding these spontaneously formed activity-regions of city. More insight into the fundamental connectivity within the urban mobility data assists to know more about the hubs and backbones of urban network and dig more latent activity information. Hence, more and more researchers have been devoted into the studies of urban mobility patterns.

Taxi trajectory data can be mainstream data to be applied into the urban analytics. However, Taxi trajectory data is often only a subset of urban public traffic flow and can be limited to directly be applied to a measure of urban flow....

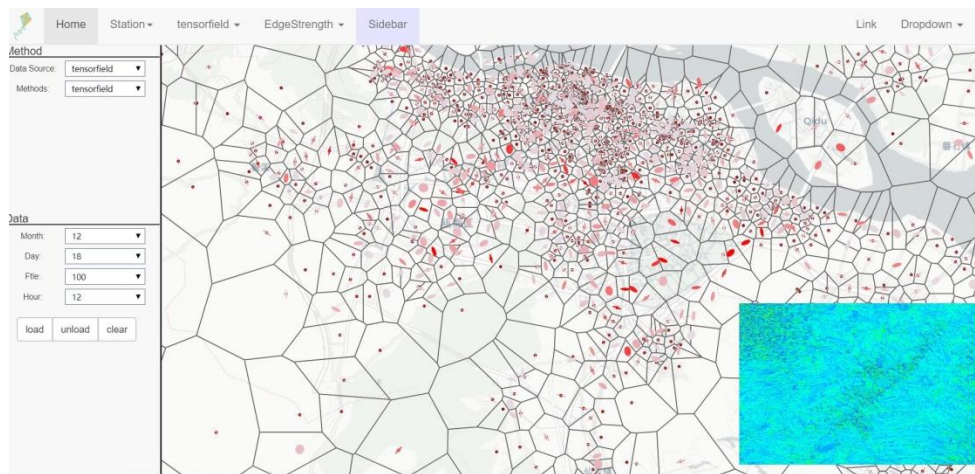
Our contribution is

- 1) To visualize flow information near base station based on urban movement data.
 - 2) Improved lagrangian-based ftle algorithm applied in real urban mobility data set.
 - 3) A visual comparison framework integrated with Eulerian and Lagrangian method and continuous algorithm applied to discrete grid.
2. 之前跑出的 lic 图不能在地图上缩放, 大概有两种解决方法:
 - 1) 缩放 lic 图的每个像素 (徐尝试)
 - 2) 用之前尝试过的流图来代替 lic 的效果, 因基站点比较离散, 并且不适合等距划分来插值粒子新位置的向量。所以我考虑对基站点进行 voronoi 划分, 那么粒子在 voronoi 的多边形区域的的向量以该点基站的主特征向量为主

基于 2) 在地图上实现了对基站的 voronoi 图划分。并且 voronoi 图可根据地图进行缩放。



3. 徐初步把结果整合到系统里，可以进行简单的交互和查看



下周：

1. 完成 Introduction
2. 在地图上实现类似 lic 图的流图效果并可进行缩放